Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A nanoparticle coating system for medical implants comprising:

one or more drugs nanopulversized to have nanoparticulate sizes of approximately 10 nm to 500 nm and at least one biocompatible polymer.

Claim 2 (original): The nanoparticle coating system of claim 1 wherein the drug is selected from the group consisitng of paclitaxel, docetaxel, epothilones, nitric oxide, heparin, aspirin, coumadin, PPACK, hirudin, polypeptide from angiostatin and endostatin, geldanamycin, herbimycin, macbecin, methotrexate, 5-fluorouracil, estradiol, P-selectin glycoprotein ligand-1 chimera, abciximab, exochelin, eleutherobin, sarcodictyin, fludarabine, sirolimus, rapamycin, ABT-578, certican, sulindac, tranilast, rosiglitazone, troglitazone, pioglitazone, darglitazone, englitazone, tetracyclines, VEGF, transforming growth factor (TGF)-beta, insulin-like growth factor (IGF), platelet derived growth factor (PDGF), fibroblast growth factor (FGF), RGD peptide, 17 beta-estradiol, radioactive agents and combinations thereof.

Claim 3 (currently amended): The nanoparticle coating system of claim 1 wherein the polymer is non-bioabsorbable ~~a polymer~~.

Claim 4 (original): The nanoparticle coating system of claim 1 wherein the polymer is bioabsorbable.

Claim 5 (original): The nanoparticle coating of claim 1 wherein the drug is suspended in a matrix having a plurality of openings.

Claim 6 (original): The nanoparticle coating of claim 5 wherein the openings have substantially similar sizes.

Claim 7 (original): A medical implant comprising having a coating according to any one of claims 1 through 6.

Claim 8 (original): The medical implant of claim 7 wherein the surface is a matrix having variable mesh size.

Claim 9 (original): The medical implant of 7 wherein the surface is a matrix having single mesh size.

Claim 10 (withdrawn): A controlled release coating for an implantable medical device comprising:

a terpolymer-bipolymer blend having a total solubility parameter (δ_T) approximately equal to a bioactive agent's solubility parameter (δ) and wherein δ_T and δ is between 15 $J^{1/2}/cm^{3/2}$ to 25 $J^{1/2}/cm^{3/2}$ and at least one drug agent nanopulversized to have nanoparticulate sizes of approximately 10 nm to 500 nm.

Claim 11 (withdrawn): The controlled release coating according to claim 10 wherein said coating has a glass transition point (Tg) between approximately -20°C and 50°C.

Claim 12 (withdrawn): The controlled release coating according to claim 10 wherein said terpolymer comprises relative weight percent concentrations of monomer subunits consisting essentially of vinyl acetate (VAc), alkyl methacrylate (AMA) and n-vinyl pyrrolidone (NVP) and said bipolymer comprises relative weight percent concentrations of monomer subunits consisting essentially of VAc and AMA.

Claim 13 (withdrawn): The controlled release coating according to claim 12 wherein said relative weight percent concentrations of said monomer subunits in said terpolymer comprises from 7-30% (VAc), 40-75% (AMA) and 19-30% (NVP).

Claim 14 (withdrawn): The controlled release coating according to claim 12 wherein said relative weight percent concentrations of said monomer subunits in said bipolymer comprises from 5-70% VAc and from 30-95% AMA

Claim 15 (withdrawn): The controlled release coating according to claim 12 wherein said alkyl methacrylate is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, and hexyl.

Claim 16 (withdrawn): The controlled release coating according to any one of claims 10 though 15 wherein said δ_T is approximately 15 to 21 and said polymer blend comprises from 40% to 80% bipolymer and from 20% to 60% terpolymer.

Claim 17 (withdrawn): The controlled release coating according to any one of claims 10 through 15 wherein said bipolymer has a lower Tg than said terpolymer.

Claim 18 (original): The controlled release coating according to claim 1 wherein said drug is selected from the group consisting of anti-proliferatives including, but not limited to, macrolide antibiotics including FKBP 12 binding compounds, estrogens, chaperone inhibitors, protease inhibitors, protein-tyrosine kinase inhibitors, peroxisome proliferator-activated receptor gamma ligands (PPARγ), hypothemycin, nitric oxide, bisphosphonates, epidermal growth factor inhibitors, antibodies, antibiotics, proteasome inhibitors anti-sense nucleotides and transforming nucleic acids.

Claim 19 (original): The controlled release coating according to claim 18 wherein said antiproliferative is a FKBP 12 binding compound.

Claim 20 (original): The controlled release coating according to claim 19 wherein said FKBP 12 binding compound is a macrolide antibiotic.

Claim 21 (withdrawn): A vascular stent comprising:

a structure comprising a material, said material having a coating thereon comprised of a hydrophobic polymer;

a terpolymer-bipolymer blend over said hydrophobic polymer wherein the difference between the solubility parameters of said terpolymer-bipolymer blend and said bioactive agent is no greater than 10 $J^{1/2}/cm^{3/2}$ and the total solubility parameter (δ_T) of said bioactive agent-containing terpolymer-bipolymer blend is no greater than 25 $J^{1/2}/cm^{3/2}$ and at least one one drug nanopulversized to have nanoparticulate sizes of approximately 10 nm to 500 nm.

Claim 22 (withdrawn): The vascular stent according to claim 21 wherein said hydrophobic polymer is parylene or a parylene derivative.

Claim 23 (withdrawn): The vascular stent according to claim 21 wherein said terpolymer comprises relative weight percent concentrations of monomer subunits consisting essentially of vinyl acetate (VAc), alkyl methacrylate (AMA) and n-vinyl pyrrolidone (NVP) and said bipolymer comprises relative weight percent concentrations of monomer subunits consisting essentially of VAc and AMA.

Claim 24 (withdrawn): The vascular stent according to claim 23 wherein said relative weight percent concentrations of said monomer subunits in said terpolymer comprises from 7-30% (VAc), 40-75% (AMA) and 19-30% (NVP).

Claim 25 (withdrawn): The vascular stent according to claim 23 wherein said relative weight percent concentrations of said monomer subunits in said bipolymer comprises from 5-70% VAc and from 30-95% AMA.

Claim 26 (withdrawn): The vascular stent according to claim 23 wherein said alkyl methacrylate is selected from the group consisting of methyl, ethyl, propyl, butyl, pentyl, and hexyl.

Claim 27 (withdrawn): The vascular stent according to anyone of claims 21 though 26 wherein said δT is approximately 15 to 21 and said polymer blend comprises from 40% to 80% bipolymer and from 20% to 60% terpolymer.

Claim 28 (withdrawn): The vascular stent according to anyone of claims 21 though 27 wherein said bipolymer has a lower Tg than said terpolymer.

Claim 29 (withdrawn): The vascular stent according to claim 21 wherein said drug is selected from the group consisting of anti-proliferatives including, but not limited to, macrolide antibiotics including FKBP 12 binding compounds, estrogens, chaperone inhibitors, protease inhibitors, protein-tyrosine kinase inhibitors, peroxisome proliferator-activated receptor gamma ligands (PPARγ), hypothemycin, nitric oxide, bisphosphonates, epidermal growth factor

inhibitors, antibodies, antibiotics, proteasome inhibitors anti-sense nucleotides and transforming nucleic acids.

Claim 30 (withdrawn): The vascular stent according to claim 29 wherein said antiproliferative is a FKBP 12 binding compound.

Claim 31 (withdrawn): The vascular stent according to claim 30 wherein said FKBP 12 binding compound is a macrolide antibiotic.